

Early-career labor market situation of Swiss sociology graduates at the Master's level

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Introduction

The goal of this contribution is to give a brief statistical overview of the labor market situation of graduates holding a Master's degree in sociology from one of the Swiss universities. Due to data constraints, the focus is on early careers, that is, to be precise, on the situation five years after graduation. Based on data from the graduate surveys by the Swiss Federal Statistical Office (FSO), sociology graduates will be compared to university graduates from related disciplines with respect to labor market participation, occupational position and other job characteristics, earnings, job adequacy, and achievement of occupational aspirations. Descriptive results show that, overall, sociology graduates do very well, with high employment rates and good positions in terms of leadership responsibility. However, levels of job adequacy and the realization of occupational aspirations are somewhat lower than in the other disciplines, especially compared to economics and psychology.

Data and methods

The results below are based on the surveys of higher education graduates (EHA) by the Swiss Federal Statistical Office (FSO) that are conducted every other year as full population censuses of higher education graduates (i.e., students who acquired a Bachelor's degree, diploma, licentiate, Master's degree, or PhD in the given year) from cantonal universities, federal institutes of technology, universities of applied sciences, and universities of teacher education.¹ The analysis will only include graduates at the Master's level (including licentiate and diploma, which were still common in earlier waves of the survey). Furthermore, the

¹ For details on methods and design of the EHA see <http://www.bfs.admin.ch/bfs/en/home/statistics/education-science/surveys/ashs.html>.

analysis will only focus on graduates from cantonal universities and federal institutes of technology.

The EHA is designed as a panel survey with a first data collection one year after graduation and a follow-up survey five years after graduation. The analysis below will use the data from the follow-up survey, that is, it describes the labor market situation of the graduates five years after graduation. Despite being designed as a full census, the EHA is incomplete in the sense that only a fraction of the covered population actually participates in the survey; the response rates are about 60% for the first-wave survey and about 65% (of respondents who participated in the first survey) for the second-wave survey. To compensate for non-response, all calculations below employ the survey weights provided by the FSO. Furthermore, because the yearly number of sociology graduates is small, data from several cohorts will be pooled. In particular, the analysis will include graduates from 2002, 2004, 2006, 2008, 2010, and 2012 (that is, the analysis will be based on the second-wave surveys from 2007, 2009, 2011, 2013, 2015, and 2017).²

As mentioned, the aim is to compare sociology graduates to graduates from related disciplines. Sociology has many facets and it thus makes sense to use multiple comparison groups. In the classification of disciplines by the FSO, sociology is categorized under “social sciences”, together with disciplines such as psychology, political science, educational science, and communication and media. Psychology is by far the largest discipline in this group and might not be considered a typical social science discipline due to its close relation to medical science. Therefore, psychology will be treated as a separate category. A further comparison group will be economics (but not business) because, depending on specialization, the skills of sociologists and economists can be similar. Finally, again depending on specialization, sociologists can be similar to graduates from history and cultural sciences, which will serve as yet another comparison group. To summarize, the following groups will be compared:

- sociology (FSO code 10405)

² Since the survey weights provided by the FSO are scaled as extrapolation factors (i.e., they sum up to the population size), simple pooling of the data without applying any adjustment to the weights is feasible. The “study population” under investigation thus is the joint population of all graduates from 2002, 2004, 2006, 2008, 2010, and 2012.

- other social sciences: political science, educational science, communication and media, special pedagogy, human geography, social work, multidisciplinary/other (FSO codes 10402–10404, 10406–10410)
- psychology (FSO code 10401)
- economics (FSO code 20001)
- history and cultural sciences: history, ethnology/social anthropology, art history, philosophy, archeology, theatre and film studies, musicology, multidisciplinary/other (FSO codes 10301–10308)

Table 1 shows the sample sizes for the different groups as well as their estimated proportion in the population (by cohort and in total across all cohorts). No clear trend can be observed in terms of the sizes of the different groups across time. The proportion of sociologists fluctuates between 3.3 and 5.9%; pooled across all cohorts the proportion amounts to 4.7%.

[Table 1]

The results below will report descriptive statistics such as proportions and averages by comparison groups for various characteristics. All tables will also include approximate p-values from tests of sociology against each other group. In addition to the overall results, each table will also contain a break-down by gender, including p-values of tests for gender differences.³

Results

Labor market participation

³ The p-values will be based on logistic regressions in case of proportions. They will not be adjusted for multiple testing and no finite-population correction will be applied. Because the graduate surveys are censuses, the use of p-values is debatable. In this contribution, the p-values merely serve as a rough indication for whether a difference is “systematic” or whether it might as well just be a result of chance. For example, in a test of sociology against another discipline, the p-value indicates how likely an absolute difference of at least the observed size is, if the observations are assumed to be independent realizations of a random process in which there is no difference between the disciplines. Likewise, the p-value for a gender difference quantifies the probability of a gender gap that is at least as large as observed, assuming the data to be generated by an unsystematic random process.

In Table 2 we see that a vast majority of about 93% of sociologists has been gainfully employed at the time of the interview (i.e. five years after graduation). The value is comparable to the other disciplines, with the exception of economists, who were gainfully employed in almost 97% of cases. Less than 3% of sociologists have been unemployed, and 4.5% were not participating in the labor market.⁴ These values are again roughly comparable to the other disciplines, although economists had a significantly higher proportion of graduates who were gainfully employed. In terms of gender differences, we see that labor market participation tends to be slightly lower for women, but the differences are mostly not statistically significant (at least not in separate test within disciplines; across all disciplines there is a gender gap in labor market participation of 1.2 percentage points, $p = 0.026$).

[Table 2]

The remaining analyses will focus on graduates who were gainfully employed at the time of the interview. That is, graduates who were unemployed or who were not participating in the labor will be excluded from the remaining analyses.

Economic sectors and types of occupations

In which economic sectors and in what types of occupations do sociologists work? Table 3 displays a breakdown into public sector, NGOs, and for-profit sector. A proportion of 53% of sociologists were working in the public sector, 15% were working for an NGO, and 32% were working in the private sector. Economists have quite a different profile with a much higher share in the private sector and clearly lower values in the public sector and the NGO sector. Furthermore, psychologists and graduates in history and cultural science worked more often in the public sector and less often in the private sector than sociologists. Some gender differences are that women tended to work for an NGO more often than men did and were less often employed in the private sector. An exception is psychology where the gender trade-off seems to be between public sector and private sector. In general, gender differences are less pronounced in sociology and in economics than in the other disciplines.

⁴ Note that the numbers displayed in Table 2 are not unemployment rates. For unemployment rates the number of unemployed graduates has to be divided by the number of graduates participating in the labor market (i.e. the unemployed plus the gainfully employed), not the total number of graduates.

[Table 3]

In Table 4, the distribution across major occupational groups according to the ISCO classification (International Standard Classification of Occupations) is shown. Occupational groups that typically do not require an academic qualification have been merged into a single category (“other occupations”). Most sociologists were working in ISCO group 2 (professionals; 64%), which was to be expected given their qualification. Another 17% worked as managers (group 1) and 13% percent worked in group 3 (technicians and associate professionals). Only a small minority of 6% worked in non-academic occupational groups. This distribution is very well aligned with the distribution observed for “other social sciences”. The most notable difference to the remaining disciplines is that psychologists were concentrated much more in group 2. No clear pattern can be observed with respect to gender differences.

[Table 4]

Part-time and temporary work

As discussed above, a large majority of sociology graduates has been active on the labor market. However, relevant questions are also how much they worked and how secure their jobs were. Table 5 therefore displays the proportion of part-time work and the proportion of graduates who had an employment contract with a fixed duration. About 55% of sociologists worked part-time (workload of less than 90%), although in most cases with a workload of 50% or more (the proportion of part-time employment with a workload of less than 50% was only 7.5%). This means that only about 45% of gainfully employed sociologists had a full-time job. Compared to the other disciplines, this is about an average value. Economists and other social scientists worked more often fulltime, psychologists and graduates from history and cultural science less often. As expected due to persisting gender roles, there is a marked gender difference in the sense that part-time work was much more prevalent among women than among men. Sociology, however, is a notable exception in this regard: in contrast to the other disciplines, there was almost no gender difference in the proportion of part-time work among sociologists.

[Table 5]

About one quarter of sociology graduates had a temporary contract at the time of the interview. This appears to be slightly more than for most of the other disciplines, although the differences are not very pronounced.

Leadership responsibility

Another relevant characteristic to evaluate the occupational success of sociologists is the level of responsibility that comes along with the jobs they do. Table 6 displays the proportion of graduates who had managerial responsibility (among all employees; excluding the self-employed) and the proportion of graduates who had budget responsibility. With respect to managerial responsibility (i.e., the proportion of graduates in lower, middle, or upper management), sociologists were in a similar range as economists and graduates from other social sciences, whereas psychologists and graduates from history and cultural sciences had substantially lower rates. Interestingly, however, sociologists outperformed the other disciplines in terms of the proportion of graduates who had budget responsibility.

[Table 6]

With respect to managerial responsibility and budget responsibility, we see some gender differences in the sense that the rates are higher for men than for women. This gender-gap, however, is only clearly visible in other social sciences, psychology, and history and cultural science. In sociology, the gap is less pronounced and not significant, and in economics the gap even goes in the other direction (not significant).

Earnings

The relatively high level of leadership responsibility among sociologists does not necessarily translate into high levels of earnings. Table 7 shows median yearly earnings (standardized to a 100% job) for the different disciplines. Here, sociology, together with history and cultural science, is at the lower end with a value of about 88 thousand Swiss francs. However, the differences to the other social sciences (90 thousand) and psychology (91 thousand) are small. Only economists earned considerably more (98 thousand). In all disciplines, the median earnings of women were lower than the median earnings of men, but in sociology, other social sciences, and psychology, the difference is small and not significant. In economics and in

history and cultural science, a substantial gender-gap in earnings of about 5 to 6 thousand Swiss francs per year can be found.

[Table 7]

Job adequacy

A further relevant dimension for evaluating sociologists' occupational success is the degree to which a job fits the graduate's qualification. Table 8 shows the percentage of gainfully employed graduates who indicated in the survey that a degree in their discipline (or a related discipline) was a formal requirement of their job. The disciplines group into two clusters, with values of 56–59% for sociology, other social sciences, and history and cultural science on the one hand, and a value of 76% for psychology and economics on the other hand. That is, more than 40% of sociologists worked in occupations for which a Master's degree in sociology or in a related field would not have been required. For economists and psychologists, the link between qualification and actual job is much stronger. This is not surprising as study programs in these disciplines place a stronger focus on job-specific expertise than the more generalist programs in disciplines such as sociology or history do.

[Table 8]

A similar picture is found when asking graduates about whether they consider their current job as adequate to their qualification with respect to position, tasks, skills, and earnings (Table 9). On all these measures, sociology scored worst among the disciplines. The gap to the other disciplines may not be huge in absolute terms, but is statistically significant in most cases, especially compared to economists and psychologists. This may indicate that sociologists had somewhat more difficulties than graduates from the other disciplines to find jobs that met their expectations due to their qualification.

[Table 9]

Overall realization of occupational aspirations

The finding of a relatively low level of job adequacy is partially confirmed by results on the question about whether graduates think that they were successful, so far, in realizing their occupational aspirations (Table 10). About two thirds of sociology graduates indicated that they mostly or fully achieved their aspirations, which is considerably less than among psychologists (74%) or economists (78%). Interestingly this comparably low level of self-reported occupational success among sociologists is driven exclusively by women; for men, no systematic difference to the other disciplines can be found. A similar, but somewhat less pronounced observation can be made for history and cultural science.⁵

[Table 10]

Conclusions

Overall, the presented results draw a very positive picture of the labor market situation of sociology graduates. Labor market participation is high, unemployment low, earnings are similar as in related disciplines, and sociologists mostly work in high-qualification occupations such as professionals and managers. The share of sociology graduates with managerial responsibility is relatively high and in terms of budget responsibility, sociologists even outperform the other disciplines. Yet, sociologists perceive the correspondence between their work and their qualification as comparatively low. Related to that, the proportion of sociologists who believe that they could realize their occupational aspirations is lower than in some of the comparison disciplines. The relatively low level of job adequacy may indicate that sociologists, due to lack of a clear sociological job profile in the labor market, have to be more flexible than graduates from other disciplines when it comes to finding a suitable job and launching a successful career.

In this contribution, only average results were reported. A natural starting point for follow-up research – especially once data on additional cohorts of sociology graduates becomes available and the sample size increases – would be to look into heterogeneity of labor market situations by detailed characteristics. This seems particularly relevant for our discipline because there is not just *one* sociology and sociological education can have many faces.

⁵ Furthermore, note that in these two disciplines there is also some evidence for a corresponding gender gap in job adequacy (see Table 9).

Furthermore, the results presented in this contribution were at the level of rather crude statistical categories. More detailed research on typical jobs – or typical job characteristics – of sociology graduates, if such types exist, would be highly welcome.

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Supporting information

A full documentation of the analysis can be found at <http://doi.org/10.7892/boris.136183>.

Table 1. Sample sizes and distribution of disciplines

Discipline	N	Proportion (weighted)						Total
		2002	2004	2006	2008	2010	2012	
Sociology	364	3.7	5.9	5.2	5.2	4.5	3.3	4.7
Other social sciences	2637	35.3	36.2	35.2	43.5	36.7	40.3	38.1
Psychology	1997	28.4	26.8	29.6	20.0	25.0	24.4	25.5
Economics	498	7.7	9.1	6.9	7.8	7.0	9.8	8.0
History and cultural science	1845	24.8	22.0	23.1	23.5	26.8	22.3	23.7
Total	7341	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Table 2. Labor market status

			By gender		
	Percent	p-value ^a	Male	Female	p-value ^b
<i>Gainfully employed</i>					
– Sociology	92.6		93.9	91.9	0.504
– Other social sciences	93.1	0.762	92.7	93.3	0.624
– Psychology	93.9	0.392	95.1	93.6	0.298
– Economics	96.7	0.013	97.5	94.9	0.146
– History and cultural science	91.1	0.352	93.1	89.7	0.020
<i>Unemployed/looking for a job</i>					
– Sociology	2.8		3.9	2.2	0.400
– Other social sciences	2.9	0.915	3.3	2.7	0.492
– Psychology	1.8	0.223	1.2	1.9	0.335
– Economics	1.3	0.110	1.4	1.1	0.787
– History and cultural science	2.3	0.608	1.7	2.8	0.148
<i>Not in the labor force</i>					
– Sociology	4.5		2.2	5.9	0.125
– Other social sciences	4.0	0.621	4.0	4.0	0.984
– Psychology	4.3	0.862	3.7	4.5	0.550
– Economics	2.1	0.060	1.1	4.0	0.055
– History and cultural science	6.6	0.153	5.2	7.5	0.071

^a p-value of test against sociology, ^b p-value of test for gender difference; N = 7338

Table 3. Economic sectors

			By gender		
	Percent	p-value ^a	Male	Female	p-value ^b
<i>Public sector</i>					
– Sociology	52.6		54.5	51.4	0.597
– Other social sciences	50.0	0.394	48.9	50.7	0.417
– Psychology	63.2	0.000	56.6	64.6	0.007
– Economics	41.5	0.002	40.5	43.5	0.553
– History and cultural science	61.7	0.002	60.6	62.6	0.426
<i>Nongovernmental organization (NGO)</i>					
– Sociology	15.4		12.4	17.2	0.255
– Other social sciences	16.9	0.515	14.0	18.5	0.010
– Psychology	11.7	0.066	12.1	11.6	0.820
– Economics	5.9	0.000	5.4	6.9	0.511
– History and cultural science	14.7	0.730	11.9	16.6	0.010
<i>For-profit sector</i>					
– Sociology	32.0		33.1	31.4	0.745
– Other social sciences	33.1	0.700	37.1	30.8	0.003
– Psychology	25.1	0.009	31.3	23.7	0.004
– Economics	52.7	0.000	54.1	49.5	0.372
– History and cultural science	23.6	0.001	27.5	20.8	0.002

^a p-value of test against sociology, ^b p-value of test for gender difference; N = 6766

Table 4. Types of occupations

	Percent	p-value ^a	By gender		
			Male	Female	p-value ^b
<i>Managers (ISCO major group 1)</i>					
– Sociology	16.9		19.4	15.5	0.371
– Other social sciences	19.9	0.207	20.0	19.9	0.954
– Psychology	7.5	0.000	10.9	6.7	0.015
– Economics	15.3	0.569	14.1	18.1	0.302
– History and cultural science	14.5	0.282	15.5	13.9	0.387
<i>Professionals (ISCO major group 2)</i>					
– Sociology	63.9		68.0	61.5	0.253
– Other social sciences	63.2	0.813	61.1	64.3	0.130
– Psychology	81.7	0.000	80.7	81.9	0.621
– Economics	64.5	0.856	65.2	63.0	0.660
– History and cultural science	70.2	0.028	71.3	69.4	0.446
<i>Technicians and associate professionals (ISCO major group 3)</i>					
– Sociology	12.9		8.3	15.5	0.086
– Other social sciences	11.6	0.497	12.3	11.1	0.412
– Psychology	6.6	0.000	4.9	7.0	0.165
– Economics	17.0	0.129	17.6	15.6	0.611
– History and cultural science	8.2	0.008	6.7	9.2	0.069
<i>Other occupations</i>					
– Sociology	6.3		4.2	7.5	0.301
– Other social sciences	5.4	0.511	6.7	4.7	0.058
– Psychology	4.1	0.111	3.5	4.3	0.551
– Economics	3.2	0.050	3.1	3.3	0.883
– History and cultural science	7.1	0.650	6.6	7.5	0.540

^a p-value of test against sociology, ^b p-value of test for gender difference; N = 6532

Table 5. Part-time and temporary work

	Percent	p-value ^a	By gender		
			Male	Female	p-value ^b
<i>Works 90% or less (N = 6825)</i>					
– Sociology	54.4		52.7	55.5	0.626
– Other social sciences	40.8	0.000	30.2	46.7	0.000
– Psychology	64.7	0.000	48.3	68.3	0.000
– Economics	23.8	0.000	20.5	30.9	0.017
– History and cultural science	61.3	0.020	53.3	67.0	0.000
<i>Works 50% or less (N = 6825)</i>					
– Sociology	7.5		5.8	8.5	0.365
– Other social sciences	4.8	0.031	2.4	6.1	0.000
– Psychology	7.9	0.820	3.5	8.8	0.002
– Economics	2.5	0.006	2.7	2.1	0.715
– History and cultural science	10.7	0.071	8.8	12.1	0.041
<i>Has a temporary contract (N = 6831)</i>					
– Sociology	26.3		24.8	27.2	0.639
– Other social sciences	20.9	0.028	23.3	19.6	0.042
– Psychology	23.1	0.220	22.6	23.2	0.801
– Economics	20.4	0.057	18.7	23.9	0.208
– History and cultural science	31.7	0.057	28.8	33.7	0.038

^a p-value of test against sociology, ^b p-value of test for gender difference

Table 6. Leadership position

	Percent	p-value ^a	By gender		
			Male	Female	p-value ^b
<i>Has (some) managerial responsibility (excluding self-employed) (N = 6575)</i>					
– Sociology	37.9		40.8	36.2	0.421
– Other social sciences	36.8	0.693	42.4	33.6	0.000
– Psychology	21.2	0.000	27.2	19.8	0.004
– Economics	39.8	0.602	38.8	41.9	0.537
– History and cultural science	30.3	0.008	32.9	28.5	0.065
<i>Has budget responsibility (N = 6825)</i>					
– Sociology	23.6		26.0	22.2	0.433
– Other social sciences	18.0	0.015	19.9	17.0	0.079
– Psychology	8.7	0.000	13.3	7.7	0.001
– Economics	11.3	0.000	10.6	12.8	0.482
– History and cultural science	17.1	0.005	20.9	14.4	0.001

^a p-value of test against sociology, ^b p-value of test for gender difference

Table 7. Standardized yearly earnings (in 1000 CHF)

	Median	p-value ^a	By gender		
			Male	Female	p-value ^b
Sociology	87.8		90.9	90.6	0.211
Other social sciences	90.0	0.085	91.8	90.1	0.354
Psychology	91.0	0.010	92.1	91.6	0.450
Economics	98.0	0.000	99.2	93.1	0.012
History and cultural science	87.9	0.888	92.3	87.1	0.000

^a p-value of test against sociology, ^b p-value of test for gender difference; N = 6646

Table 8. Job requires respondent's degree or a similar degree

	Percent	p-value ^a	By gender		
			Male	Female	p-value ^b
Sociology	55.7		57.4	54.8	0.650
Other social sciences	58.8	0.298	55.8	60.4	0.035
Psychology	76.4	0.000	74.0	76.9	0.278
Economics	76.4	0.000	79.2	70.3	0.044
History and cultural science	55.9	0.944	55.1	56.5	0.571

^a p-value of test against sociology, ^b p-value of test for gender difference; N = 6786

Table 9. Adequacy of current job to graduates' qualification

	Mean ^a	p-value ^b	By gender		
			Male	Female	p-value ^c
<i>With respect to position (N = 6619)</i>					
– Sociology	3.47		3.63	3.38	0.074
– Other social sciences	3.68	0.006	3.63	3.71	0.148
– Psychology	3.87	0.000	3.79	3.89	0.213
– Economics	3.92	0.000	3.94	3.88	0.591
– History and cultural science	3.61	0.069	3.65	3.58	0.285
<i>With respect to tasks (N = 6616)</i>					
– Sociology	3.45		3.65	3.33	0.017
– Other social sciences	3.61	0.019	3.54	3.66	0.025
– Psychology	3.85	0.000	3.77	3.87	0.171
– Economics	3.81	0.000	3.82	3.79	0.756
– History and cultural science	3.59	0.053	3.64	3.55	0.181
<i>With respect to skills (N = 6752)</i>					
– Sociology	3.38		3.45	3.33	0.381
– Other social sciences	3.50	0.086	3.44	3.53	0.071
– Psychology	3.66	0.000	3.58	3.67	0.188
– Economics	3.70	0.000	3.73	3.65	0.543
– History and cultural science	3.48	0.153	3.51	3.46	0.421
<i>With respect to earnings (N = 6608)</i>					
– Sociology	3.11		3.23	3.04	0.172
– Other social sciences	3.26	0.040	3.23	3.27	0.464
– Psychology	3.19	0.257	3.18	3.20	0.830
– Economics	3.56	0.000	3.58	3.54	0.741
– History and cultural science	3.13	0.814	3.21	3.07	0.031

^a on a scale from 1 “not at all” to 5 “very much”, ^b p-value of test against sociology, ^c p-value of test for gender difference

Table 10. Realization occupational aspirations

	Percent	p-value ^a	By gender		
			Male	Female	p-value ^b
Sociology	66.9		75.3	62.1	0.018
Other social sciences	71.1	0.121	70.5	71.5	0.635
Psychology	74.2	0.007	75.7	73.8	0.505
Economics	78.1	0.001	76.4	81.7	0.215
History and cultural science	67.7	0.783	70.9	65.4	0.024

^a p-value of test against sociology, ^b p-value of test for gender difference; N = 6775